



June 14, 2017

Ex Parte

Ms. Marlene Dortch
Secretary
Federal Communications Commission
445 12th Street, SW
Washington, D.C. 20554

Re: USTelecom Ex Parte Notice Advanced Methods to Target and Eliminate
Unlawful Robocalls, CG Docket No. 17-59

Dear Ms. Dortch:

On Monday, June 12, 2017, the undersigned met with Antonio Sweet and Henning Schulzrinne of the Office of Strategic Planning & Policy (Office) of the Federal Communications Commission (Commission) to discuss the above referenced proceeding. As required by the October report of the industry-led Robocall Strike Force,¹ USTelecom provided staff from the Office with a briefing the Do Not Originate report submitted to the industry-led Strike Force on March 31, 2017. The attached presentation was referenced during the discussion.

Pursuant to Commission rules, please include this ex parte letter in the above identified proceeding.

Sincerely,

A handwritten signature in blue ink, appearing to read "Kevin G. Rupy". The signature is fluid and cursive, with a long horizontal stroke at the end.

Kevin G. Rupy
Vice President, Law & Policy

cc: Henning Schulzrinne
Antonio Sweet

¹ Industry Robocall Strike Force Report, p. 34, October 26, 2016 (available at: <https://transition.fcc.gov/cgb/Robocall-Strike-Force-Final-Report.pdf>) (visited June 14, 2017).



USTelecom

Do Not Originate (DNO)

FCC Briefing

Kevin G. Rupy
Vice President, Law & Policy
USTelecom
June 12, 2017

- **Overview of DNO**
- **USTelecom Process During DNO Trials**
- **Overview of USTelecom/ITB Group DNO Trials**
- **Lessons Learned**
- **Effectiveness and Feasibility of DNO**

- DNO is a process where certain TNs are identified at VoIP gateways or interconnection points, and prevented from terminating to the end user based upon the caller ID information (Call-ING #).
- DNO is instituted by some or many carriers. Calls from TNs on a DNO list are rejected by first service provider in the call path that has implemented DNO.
- DNO is no substitute for authentication, but USTelecom's efforts showed that DNO can prevent certain subset of narrowly defined and harmful calls from reaching consumers.
- Applied in a narrow and tightly controlled manner, DNO can be an effective tool for mitigating large and medium scale attacks.

Technological Implications:

- DNO relies exclusively on easily spoofable caller-id information for implementation.
- Because phone numbers can be easily spoofed, technologies relying on caller-ID as a basis for blocking calls can easily result in legitimate calls being blocked.
 - This was principal reason USTelecom's ITB Group focused on inbound only numbers.

Policy Implications:

- Large-scale blocking activity based on caller-ID information may have unintended consequences.



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USTelecom's Five DNO Criteria

- 1) Candidate number(s) for DNO must be inbound-only;
- 2) Candidate number(s) for DNO must be currently spoofed by a robocaller in order to perpetrate impersonation-focused fraud;
- 3) Candidate number(s) for DNO must be the source of a substantial volume of calls;
- 4) USTelecom ITB Group must have authorization for participation in the DNO effort from the party to which the telephone number is assigned; and/or
- 5) Recognized by consumers as belonging to a legitimate entity, lending credence to the impersonators and influencing successful execution of the scam.



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USTelecom Process for DNO Trial

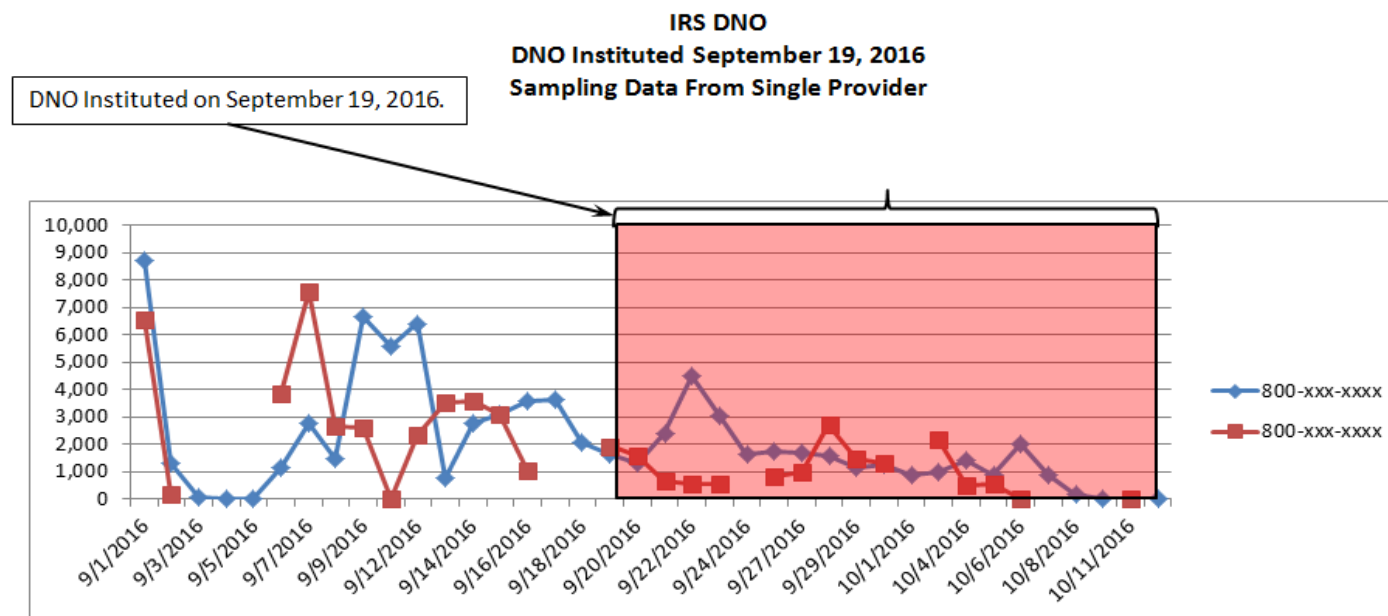
- Testing Process Focused on the Need for Real-World Data/Results
- Identification of DNO Candidates
- Obtaining Necessary Letters of Authorization from Trial Participants
- Coordination with ITB Group Members
- Analysis of DNO Effectiveness
 - Measurements before, during and after DNO



- Between September, 2016, and March, 2017, USTelecom conducted three separate DNO Trials:
 - Two federal agencies
 - One Toll Free provider
 - A third Federal agency trial was ongoing during the reporting period.
- All four DNO trials proved effective in mitigating the spoofing of vanity numbers.

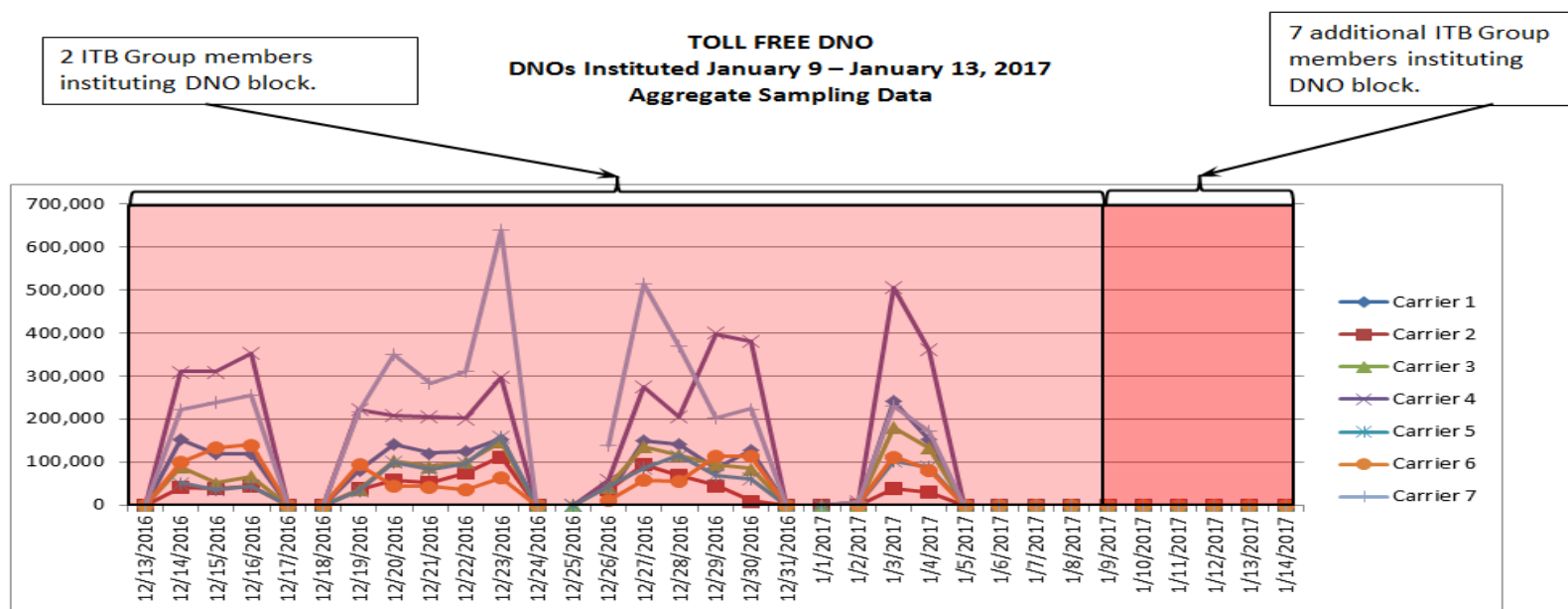
Sample Overview: DNO Trial # 1

- Numbers at issue were assigned to the Internal Revenue Service.
- The effort was conducted during the course of the Industry-led Strike Force, and the DNO measures were instituted independently of the ITB Group.
- Importance of complementary enforcement efforts: as noted during the October, 2016, meeting of the Industry Strike Force, a series of arrests in India on October 5, 2016, effectively shut these fraudulent calls down at their source.



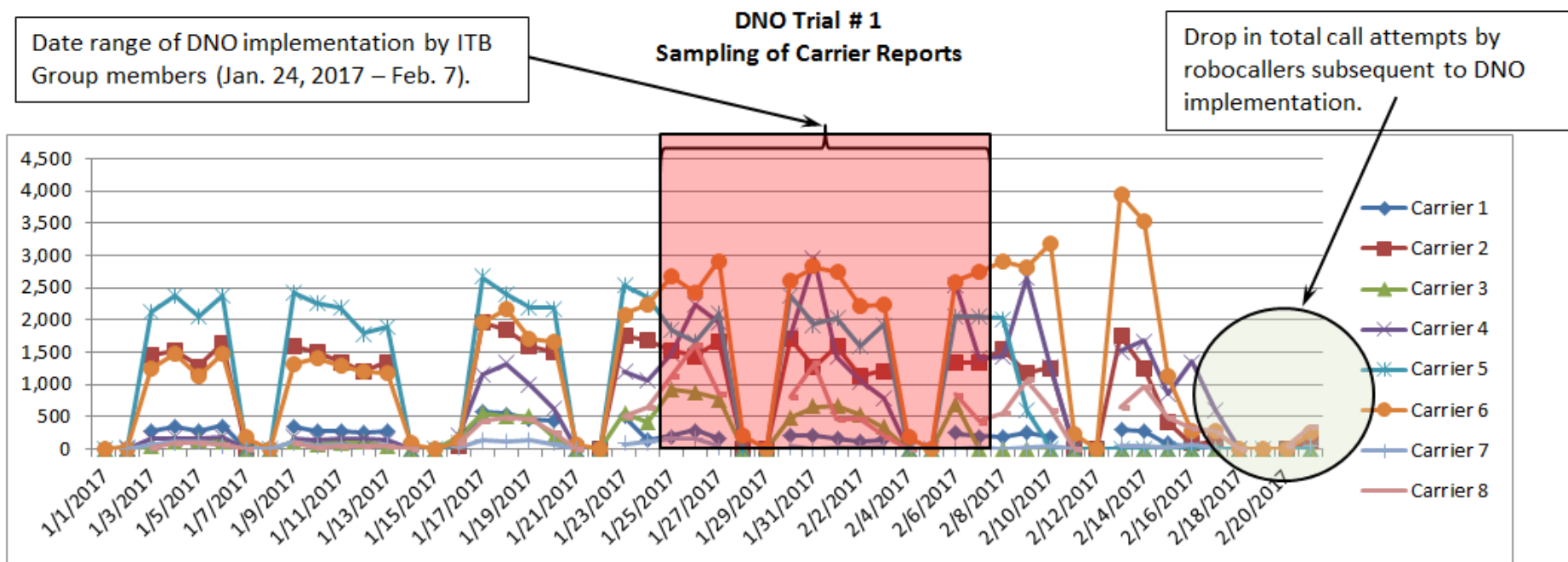
Sample Overview: DNO Trial # 2

- Number at issue was assigned to commercial entity utilizing a 1-800 number being spoofed by robocallers for fraudulent purposes.
- Prior to implementation of DNOs, analyses by ITB Group members showed call volumes ranging between just under 400,000 per day, to more than 1 million.
- Once final DNOs were instituted by ITB Group members, call volumes dropped significantly to approximately 400 per day.
- Importance of broad industry participation in DNO efforts.



Sample Overview: DNO Trial # 3

- Number at issue was assigned to a Federal government agency experiencing significant spoofing of its inbound only phone number.
- The number at issue resulted in approximately 2.2 million calls between November 1, 2016, and January 23, 2017, prior to implementation of the DNO.



Importance of Due Diligence:

- Thorough vetting measures should be undertaken to identify whether any legitimate out dial service is using the originating telephone number.
 - Owner of number needs to do due diligence;
 - Owning carrier should scan networks.

Importance of Ongoing Maintenance:

- Ongoing maintenance of TN at issue must occur to ensure that its disposition does not change over time
 - TN is changed to permit outbound calls; or
 - TN is reassigned to another entity, etc.).
- Any such change may trigger a requirement that the number is removed from its DNO status.



- DNO can be an effective tool for addressing certain types of robocalls, when it is applied in a narrow and targeted manner.
- DNO trials outlined in this report were effective due to the efforts being narrowly targeted towards the specific set of easily identified, inbound-only telephone numbers.
- For the near term, USTelecom maintains that due to the nature of DNO (*i.e.*, outright blocking in the network), its use should currently be limited to those instances where the number in question is an ‘inbound-only’ number, and appropriate authorizations are obtained from the entity to whom the number is assigned.